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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,023	04/20/2005	Kazuya Maekawa	APA-0220	6143
74384	7590	10/28/2009		
Cheng Law Group, PLLC 1100 17th Street, N.W. Suite 503 Washington, DC 20036			EXAMINER DEXTER, CLARK F	
			ART UNIT 3724	PAPER NUMBER
			MAIL DATE 10/28/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,023	<b>Applicant(s)</b> MAEKAWA ET AL.	
	<b>Examiner</b> Clark F. Dexter	<b>Art Unit</b> 3724	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6,7,11 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8-10 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. The amendment filed on July 17, 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 2 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Shimotoyodome, pn 6,460,258, pn 6,470,782, pn 6,478,206 (hereafter the Shimotoyodome patents) in view of Zumstein, pn 3,834,258 and/or Hembree et al., pn 4,709,483.

The Shimotoyodome patents each discloses a scribe apparatus with almost every structural limitation of the claimed invention including:

a scribe means for generating a high-penetration vertical crack in the brittle material substrate by applying impacts of a short period to the point on the surface of the brittle material substrate; and

a travel motion control means (e.g., 50, and the moving mechanism that causes vertical movement of the scribe means) for controlling the travel motion of the scribe means.

The Shimotoyodome patents each lacks programmable device as follows:

[from claim 2] wherein the travel motion control means is programmed to comprise (1) moving the scribe means across the brittle material substrate, (2) lifting the scribe means from the brittle material substrate upon reaching said scribe stop position, (3) moving the lifted scribe means across at least one existing scribe line to said scribe start position, and (4) lowering the scribe means to the brittle material substrate at said scribe start position, and

wherein the scribe start position and the scribe stop position in the second direction are set at a distance of 0.5mm to 0.7mm from the scribe line of the first direction.

However, the Examiner takes Official notice that the use of such programmable devices including computers with scribing or scoring devices is old and well known in the art and provides various well known benefits including automatic operation of the scribing or scoring device in a desired pattern. Zumstein discloses one example that

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teaches using a computer for controlling a scribing/scoring device (e.g., see the paragraph bridging columns 8-9). As another example, Hembree discloses a cutting device which uses a computer to provide optimizing instructions to obtain a desired result (in this case, to reduce waste in the cutting operation). Still another example are the myriad of uses, particularly analogous uses of personal computers to operate various types of devices including cutting devices such as those of the Shimotoyodome patents. Therefore, it would have been obvious to one having ordinary skill in the art to provide such a programmable computer in combination with the scoring/scribing devices of the Shimotoyodome patents for cutting any desired pattern.

Regarding claims 13-15, these claims set forth an intended use of the prior art apparatus and the prior art apparatus is/are fully capable of performing the recited functions.

#### ***Allowable Subject Matter***

4. Claims 1, 5 and 8-10 are allowable over the prior art of record.

#### ***Response to Arguments***

5. Applicant's arguments filed July 17, 2009 have been fully considered but they are not persuasive. Regarding the prior art rejection, as stated previously, the Examiner respectfully disagrees with applicant's position. While it is acknowledged that the claimed invention now requires a programmed device, it is respectfully submitted that the claim is met by a computer that is capable of being programmed in such a manner.

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Further, the Examiner's position is that such computers, which are fully capable of being programmed in such a manner, are famously well known and include personal computers or the like. Additionally, examples of prior art devices that are operated by computers have been provided. Therefore, for at least the reasons described above, it is respectfully submitted that the prior art rejections must be maintained.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-

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4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Clark F. Dexter/  
Primary Examiner, Art Unit 3724**

cfd  
October 26, 2009